

In the Claims

For the convenience of the Examiner all of the pending claims are reproduced below regardless of whether amended or not. Please amend the claims as follows:

38. A system for determining a tax for a vehicle, comprising:

a mobile unit coupled to a vehicle, the mobile unit comprising:

a positioning device operable to determine a plurality of position fixes along a route traveled by the vehicle;

an odometer operable to generate a plurality of odometer readings; and

a communications device operable to initiate transmission of the position fixes and the odometer readings based on a configurable condition;

a communications link coupled to the mobile unit, the communications link operable to receive the position fixes and the odometer readings from the mobile unit; and

a remote location coupled to the communications link, the remote location operable to receive the position fixes and the odometer readings determined by the mobile unit using the communications link, the remote location further operable to determine a tax for the vehicle in a plurality of taxing regions in response to the position fixes and the odometer readings.

39. The system of Claim 38, wherein the communications link comprises a cellular telephone network.

40. The system of Claim 38, wherein the positioning device comprises a GPS receiver to determine the position fixes.

41. The system of Claim 38, wherein the remote location comprises:

a memory operable to store geographical information that specifies a plurality of taxing regions; and

a processor coupled to the memory and operable to associate each position fix to a corresponding taxing region, the processor further operable to determine distance traveled in the corresponding taxing region using the odometer readings.

42. The system of Claim 41, wherein the processor is further operable to credit a proportionate amount of a mileage traveled by the vehicle to a first taxing region associated with a first position fix and a second taxing region associated with a successive second position fix.

43. The system of Claim 42, wherein the processor credits the proportionate amount of the mileage using the first and second position fixes and the stored geographical information.

44. The system of Claim 41, wherein the processor is further operable to determine the mileage traveled by the vehicle using a first odometer reading associated with the first position fix and a second odometer reading associated with the second position fix.

45. An apparatus on a vehicle for transmitting information to a remote location for purposes of tax determination, comprising:

a positioning device operable to determine a plurality of position fixes along a route traveled by a vehicle;

an odometer operable to generate a plurality of odometer readings; and

a transmitter coupled to the positioning device and the odometer, the transmitter operable to initiate transmission of the position fixes and the odometer readings to the remote location based on a configurable condition for purposes of tax determination.

46. The apparatus of Claim 45, wherein the transmitter comprises a cellular telephone.

47. The apparatus of Claim 45, wherein the positioning device comprises a GPS receiver.

48. The apparatus of Claim 45, further comprising a processor operable to compile a report containing the position fixes and the odometer readings.

49. The apparatus of Claim 48, wherein the report includes position fixes and odometer readings accumulated over a predetermined reporting interval specified by the configurable condition.

50. The apparatus of Claim 45, wherein each position fix is associated with a corresponding odometer reading.

51. A method for determining distances traveled by a vehicle in a plurality of taxing regions, comprising:
determining a plurality of position fixes for a vehicle;
determining a plurality of odometer readings for the vehicle;

initiating transmission of the position fixes and the odometer readings based on a configurable condition;

receiving the position fixes and odometer readings at a remote location;

storing geographic information at the remote location specifying a plurality of taxing regions;

associating at the remote location each position fix with one of the taxing regions; and

determining at the remote location a distance traveled by the vehicle in each taxing region using the odometer readings.

52. The method of Claim 51, further comprising determining a tax in each region using the determined distance.

53. The method of Claim 51, wherein the step of determining the distance further comprises:

identifying a first position fix in a first taxing region and a successive second position fix in a second taxing region; and

crediting a proportionate amount of a mileage traveled by the vehicle to the first and second taxing regions.

54. The method of Claim 53, further comprising the step of determining the mileage traveled by the vehicle using a first odometer reading associated with the first position fix and a second odometer reading associated with the second position fix.

55. The method of Claim 53, wherein the step of crediting a proportionate amount of a mileage is performed using the first and second position fixes and the stored geographical information.

56. The method of Claim 51, wherein the step of determining a plurality of position fixes is performed by a GPS receiver on the vehicle.

57. The method of Claim 51, wherein the remote location receives the position fixes and odometer readings using a cellular telephone network.

58. A method of determining distances traveled by a vehicle in a plurality of taxing regions, comprising:

- storing geographic information specifying a plurality of taxing regions;
- determining a first position fix and a successive second position fix;
- determining a mileage between the first and second position fixes;
- associating the first position fix with a first taxing region and the second position fix with a second taxing region; and
- determining a proportionate amount of the mileage traveled in the first and second taxing regions.

59. The method of Claim 58, wherein the step of determining a proportionate amount of the mileage is performed using the first and second position fixes and the stored geographical information.

60. The method of Claim 58, further comprising determining a tax in each of the first and second taxing regions using the determined amount of the mileage traveled.

61. The method of Claim 58, wherein determining a mileage comprises:

- receiving a first odometer reading associated with the first position fix;
- receiving a second odometer reading associated with the second position fix; and
- subtracting the first odometer reading from the second odometer reading to determine the mileage.

62. The method of Claim 58, wherein at least the steps of associating and determining a proportionate amount of the

mileage traveled are performed at a location remote from the vehicle.

63. The method of Claim 58, wherein all steps are performed on the vehicle.

64. The method of Claim 58, wherein the step of determining the first and second position fixes is performed by a GPS receiver on the vehicle.

65. An apparatus on a vehicle for determining distances traveled by the vehicle in a plurality of taxing regions, comprising:

a positioning device operable to determine a first position fix and a second position fix along a route traveled by the vehicle;

a memory operable to store geographic information specifying a plurality of taxing regions; and

a processor coupled to the positioning device and the memory, the processor operable to receive the first position fix and the second position fix from the positioning device, the processor further operable to associate the first position fix with a first taxing region and the second position fix with a second taxing region, the processor further operable to proportion a mileage traveled between the first and second position fixes to the first and second taxing regions.

66. The apparatus of Claim 65, wherein the processor is further operable to determine a tax for the vehicle in the first and second taxing regions using the proportioned mileage traveled between the first and second position fixes.

67. The apparatus of Claim 65, further comprising an odometer to determine the mileage traveled between the first and second position fixes.

68. The apparatus of Claim 65, wherein the positioning device comprises a GPS positioning receiver.

69. The apparatus of Claim 65, wherein the geographic information specifies boundaries of a plurality of states.

70. The apparatus of Claim 65, wherein the processor proportions a mileage traveled between the first and second position fixes using the stored geographic information and the first and second position fixes.

71. The apparatus of Claim 65, further comprising a transmitter coupled to the processor and operable to communicate the proportioned mileage to a remote location.

35 72. (Twice Amended) An apparatus remotely located from a vehicle for determining distances traveled by the vehicle in a plurality of taxing regions, comprising:

a communications device coupled to a communications link and operable to receive a plurality of position fixes and a plurality of odometer readings for a vehicle;

a memory operable to store geographical information that specifies a plurality of taxing regions; and

a central controller coupled to the communications device and the memory, the central controller operable to associate each position fix to a corresponding taxing region, the central controller further operable to determine distance traveled in the corresponding taxing regions using the odometer readings, the central controller further operable to determine a proportionate amount of a mileage traveled by the vehicle in a first region associated with a first position fix and a second region associated with a second position fix.

73. The apparatus of Claim 72, wherein the communications link comprises a cellular telephone network.

74. The apparatus of Claim 72, wherein the communications device receives a compiled report representing position fixes and odometer readings accumulated over a predetermined reporting interval.

75. The apparatus of Claim 72, wherein each position fix is associated with a corresponding odometer reading.

76. The apparatus of Claim 72, wherein the geographical information specifies boundaries of a plurality of states.

Please cancel Claim 77 without prejudice or disclaimer.

40/78. (Amended) The apparatus of Claim [77] ³⁵~~72~~, wherein the central controller uses the first and second position fixes and the stored geographical information to determine the proportionate amount of the mileage.

41/79. (Amended) The apparatus of Claim [77] ³⁵~~72~~, wherein the mileage traveled by the vehicle comprises the difference between a first odometer reading associated with the first position fix and a second odometer reading associated with the second position fix.